

ABSTRACT

This specification discloses a satellite transmission system for transmission of TCP/IP compatible packets from a head end computer through a satellite uplink, an extraterrestrial satellite, a satellite downlink, and an integrated satellite receiver/router for outputting of the TCP/IP compatible packets through a port on the receiver/router onto a computer LAN or WAN. The system may include an Internet or telecommunications backchannel. The receiver becomes router enabled by means of a removable insertion Ethernet/Router insertion card inserted into a slot in the receiver, although the transmission system may be used to simultaneously transmit a variety of other services through the receiver by use of other service slots in the receiver. The Ethernet/Receiver supports the IGMPv2 Multicasting (querier and non querier modes), standard TCP/IP (including UDP and Telnet), and SNMP protocols.

$$\begin{array}{ccccccc} \{1^{(1)}\} & \{1^{(2)}\} & \{1^{(3)}\} & \{1^{(4)}\} & \{1^{(5)}\} & \{1^{(6)}\} & \{1^{(7)}\} \\ \{2^{(1)}\} & \{2^{(2)}\} & \{2^{(3)}\} & \{2^{(4)}\} & \{2^{(5)}\} & \{2^{(6)}\} & \{2^{(7)}\} \\ \{3^{(1)}\} & \{3^{(2)}\} & \{3^{(3)}\} & \{3^{(4)}\} & \{3^{(5)}\} & \{3^{(6)}\} & \{3^{(7)}\} \\ \{4^{(1)}\} & \{4^{(2)}\} & \{4^{(3)}\} & \{4^{(4)}\} & \{4^{(5)}\} & \{4^{(6)}\} & \{4^{(7)}\} \\ \{5^{(1)}\} & \{5^{(2)}\} & \{5^{(3)}\} & \{5^{(4)}\} & \{5^{(5)}\} & \{5^{(6)}\} & \{5^{(7)}\} \\ \{6^{(1)}\} & \{6^{(2)}\} & \{6^{(3)}\} & \{6^{(4)}\} & \{6^{(5)}\} & \{6^{(6)}\} & \{6^{(7)}\} \\ \{7^{(1)}\} & \{7^{(2)}\} & \{7^{(3)}\} & \{7^{(4)}\} & \{7^{(5)}\} & \{7^{(6)}\} & \{7^{(7)}\} \end{array}$$